

COMPUTER LITERACY

Course Description: This course is designed to improve student use and understanding of information age technology. Mastering the standards will enable students to learn about and effectively access and use technology resources. Students will use a variety of computer applications and tools and will explore the social, historical and ethical implications of using computer technology. It is expected that every student will demonstrate proficiency using these standards by the time the student completes high school. These standards can be met through this course or activities incorporated into other curriculum areas. (Alternatively, students may demonstrate mastery of these standards as a result of grades K-8 technology experiences.) The course is designed so that it may be taught with a minimum number of computers.

Recommended Prerequisites: Keyboarding

Recommended Prerequisite or concurrent with: Word Processing Essentials

Grades: 9, 10,

Recommended Credit 1 Credit

COMPUTER LITERACY

Standard 1.0

Students will understand basic operations and concepts of technology.

Standard 2.0

Students will understand the importance of social, ethical, and human issues associated with technology.

Standard 3.0

Students will use technology productivity tools.

Standard 4.0

Students will use technology communications tools.

Standard 5.0

Students will select and use appropriate technology research tools.

Standard 6.0

Students will utilize technology problem-solving and decision-making tools.

Computer Literacy and Usage: High School

COMPUTER LITERACY AND USAGE 9-12

Computer Literacy

(Formerly Personal Computing)

GRADES 9 - 12

Standard 1.0

Students will understand basic operations and concepts of technology

Learning Expectations

- 1.1. Students demonstrate a sound understanding of the nature and operation of technology systems.
- 1.2. Students are proficient in the use of technology.

Performance Indicators

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 12 students will:

- Make informed choices among technology systems, resources, and services.

Sample Performance Task

Using the internet, students will research various technology systems, resources and services as they relate to computer usage and prepare a presentation on the research.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, Work Keys, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association, and Professional Secretaries International.

Standard 2.0

Students will understand the importance of social, ethical, and human issues associated with technology.

Learning Expectations

- 2.1 Students understand the ethical, cultural, and societal issues related to technology.
- 2.2 Students practice responsible use of technology systems, information, and software.
- 2.3 Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

Performance Indicators

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 12 students will:

- Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs.
- Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.
- Make informed choices among technology systems, resources, and services.
- Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information.

Sample Performance Task

Students will investigate current copyright laws as they relate to electronic media and report the findings.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, Work Keys, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association, and Professional Secretaries International.

Standard 3.0

Students will use technology productivity tools.

Learning Expectations

- 3.1 Students use technology tools to enhance learning, increase productivity, and promote creativity.
- 3.2 Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.

Performance Indicators

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 12 students will:

- Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence).
- Investigate and apply expert systems, intelligent agents, and simulations in real-world situations

Sample Performance Task

Students will develop a portfolio of word processing , database, spreadsheet, graphics, and other software application samples of their work.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, Work Keys, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association, and Professional Secretaries International.

Standard 4.0

Students will use technology communications tools.

Learning Expectations

- 4.1 Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- 4.2 Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

Performance Indicators

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 12 students will:

- Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence).
- Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.
- Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.

- Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

Sample Performance Task

Organize students into small workgroups. Have each workgroup brainstorm and debate the pros and cons of the use of electronic media as it relates to legal and ethical responsibilities.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, Work Keys, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association, and Professional Secretaries International.

Standard 5.0

Students will select and use appropriate technology research tools.

Learning Expectations

- 5.1 Students use technology to locate, evaluate, and collect information from a variety of sources.
- 5.2 Students use technology tools to process data and report results.
- 5.3 Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

Performance Indicators

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 12 students will:

- Evaluate technology-based options, including distance and distributed education, for lifelong learning.
- Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.
- Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning.
- Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.
- Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

Sample Performance Task

Given a problem the student will choose the appropriate electronic method for gathering research to solve the problem.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, Work Keys, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association, and Professional Secretaries International.

Standard 6.0

Students will utilize technology problem-solving and decision-making tools.

Learning Expectations

- 6.1 Students use technology resources for solving problems and making informed decisions.
- 6.2 Students employ technology in the development of strategies for solving problems in the real world.

Performance Indicators

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 12 students will:

- Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity.
- Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.
- Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

Sample Performance Task

Student will use electronic media to research, solve and present the solution to a given problem.

Integration/Linkages

All subject areas, SCANS (*The Secretary's Commission on Achieving Necessary Skills*), National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Standards for Business Education, Business Professionals of America *Work Place*

Skills, Future Business Leaders of America National Competencies, Delta Pi Epsilon, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards, Data Processing Management Association and International Association of Administrative Professionals Gateway Algebra I and Gateway English I